

Table 1

Natural Attenuation Performance Groundwater Monitoring Well Completion Data

Avery Landing Site

Avery, Idaho

Monitoring Well ¹	Date Installed	Installed By	IDEQ Well Identification Tag	Ground Elevation (ft)	Top of Casing Elevation (ft)	Bottom of Casing Elevation (ft)	Total Well Depth (ft bgs)	Casing Diameter (inches)	Screen Interval (ft bgs)	Screen Specifications
Background Monitoring Well										
EMW-1	4/16/2007	E&E	D0051813	TBD	2424.87	2412.3	12.6	2	2.5 to 12.5	2-inch Schedule 40 PVC 0.020-inch slot
Natural Attenuation Performance Monitoring Well										
MW-101	5/6/2014	GeoEngineers	D0061958	2423.30	2422.94	2399.8	23.1	2	7.8 to 22.8	2-inch Schedule 40 PVC 0.010-inch slot
MW-102	5/6/2014	GeoEngineers	D0061959	2416.60	2416.38	2398.4	17.9	2	2.6 to 17.6	2-inch Schedule 40 PVC 0.010-inch slot
MW-103	5/6/2014	GeoEngineers	D0061960	2417.84	2417.55	2399.2	18.3	2	3 to 18	2-inch Schedule 40 PVC 0.010-inch slot

Notes:

¹Monitoring well locations are shown on Figure 2.

Elevations referenced to North American Vertical Datum 1988 (NAVD88).

PVC = polyvinyl chloride

IDWR = Idaho Department of Water Resources

Table 2

Natural Attenuation Performance Groundwater Monitoring Well Coordinates

Avery Landing Site

Avery, Idaho

Monitoring Well ¹	Date Installed	Installed By	IDWR Well Identification Tag	Latitude and Longitude Coordinates		Idaho State Planes North Coordinates (NAD83)	
				Latitude (DMS)	Longitude (DMS)	Northing (feet)	Easting (feet)
Background Monitoring Well							
MW-101	4/16/2007	E&E	D0051813	47° 11' 35.43"	-115° 48' 01.69"	2014659.96	2612119.18
Natural Attenuation Performance Monitoring Well							
MW-101	5/6/2014	GeoEngineers	D0061958	47° 14' 56.99"	-115° 49' 13.90"	2035084.19	2607151.23
MW-102	5/6/2014	GeoEngineers	D0061959	47° 14' 56.34"	-115° 49' 16.91"	2035018.52	2606943.52
MW-103	5/6/2014	GeoEngineers	D0061960	47° 14' 56.42"	-115° 49' 22.22"	2035026.97	2606577.21

Notes:

¹Monitoring well locations are shown on Figure 2.

NAD = North American Datum

IDWR = Idaho Department of Water Resources

Table 3
Natural Attenuation Performance Groundwater Elevation Data
Avery Landing Site
Avery, Idaho

Monitoring Well Identification ¹	Quarterly Groundwater Monitoring Event	Date Measured	Top of Casing Elevation ² (feet)	Depth to Water from Top of Casing (feet)	Groundwater Elevation ² (feet)
Background Monitoring Well					
EMW-01	Round 1	5/8/2014	2424.87	6.45	2418.42
Natural Attenuation Performance Monitoring Well					
MW-101	Round 1	5/8/2014	2422.94	6.56	2416.38
MW-102	Round 1	5/8/2014	2416.38	0.98	2415.40
MW-103	Round 1	5/8/2014	2417.55	2.67	2414.88

Notes:

¹Monitoring well locations are shown on Figure 2.

²Elevation is referenced to North American Vertical Datum 1988 (NAVD88).

Table 4
Natural Attenuation Performance Groundwater Monitoring Parameters
Avery Landing Site
Avery, Idaho

Monitoring Well Identification ¹	Quarterly Groundwater Monitoring Event	Date Measured	pH	Conductivity (S/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Total Dissolved Solids (g/L)	Oxidation Reduction Potential (mV)
Background Monitoring Well									
MW-101	Round 1	5/8/2014	6.74	0.155	1.2	6.52	8.07	0.101	131
Natural Attenuation Performance Monitoring Well									
MW-201	Round 1	5/8/2014	6.70	0.547	45.1	2.28	6.21	0.35	-91
MW-207	Round 1	5/8/2014	6.86	0.236	6.1	1.06	9.42	0.153	-57
MW-202	Round 1	5/8/2014	6.51	0.307	3.2	1.71	9.46	0.199	84

Notes:

¹Monitoring well locations are shown on Figure 2.

Table 5**Summary of Natural Attenuation Performance Groundwater Sample Chemical Analytical Data**

Avery Landing Site

Avery, Idaho

Monitoring Well ID Groundwater Monitoring Event Sample Date Sample Type	Benchmark Concentration ¹	EMW-01 Round 1 5/8/2014 Background	MW-101 Round 1 5/8/2014 Attenuation Performance	MW-102 Round 1 5/8/2014 Attenuation Performance	MW-103 Round 1 5/8/2014 Attenuation Performance
Petroleum Hydrocarbons (TPH; mg/L)					
Diesel-range	--	0.1 U	0.1 U	0.1 U	0.1 U
Heavy oil-range	--	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds (VOCs; µg/L)					
1,1,1,2-Tetrachloroethane	0.5	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	200	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	53,000	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.24	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	2.4	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	7.0	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	--	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	5.2	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	0.5	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	1.0	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	15	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-chloropropane	0.5	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.2	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	280	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.38	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	87	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	9.39	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichloropropane	290	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	0.42	0.2 U	0.2 U	0.2 U	0.2 U
2,2-Dichloropropane	--	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	4,900	5 U	5 U	5 U	5 U
2-Chloroethylvinylether	--	1 U	1 U	1 U	1 U
2-Chlorotoluene	--	0.2 U	0.2 U	0.2 U	0.2 U
2-Hexanone	--	5 U	5 U	5 U	5 U
4-Chlorotoluene	--	0.2 U	0.2 U	0.2 U	0.2 U

Monitoring Well ID Groundwater Monitoring Event Sample Date Sample Type	Benchmark Concentration ¹	EMW-01 Round 1 5/8/2014 Background	MW-101 Round 1 5/8/2014 Attenuation Performance	MW-102 Round 1 5/8/2014 Attenuation Performance	MW-103 Round 1 5/8/2014 Attenuation Performance
4-Isopropyltoluene	--	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	1,000	5 U	5 U	5 U	5 U
Acetone	9,390	5 U	5 B	5 U	5 U
Acrolein	5	5 U	5 U	5 U	5 U
Acrylonitrile	1	1 U	1 U	1 U	1 U
Benzene	0.39	0.2 U	0.2 U	0.2 U	0.2 U
Bromobenzene	54	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	83	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Bromoethane	--	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	7.1	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	7	1 U	1 U	1 U	1 U
Carbon Disulfide	720	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.39	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	72	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	19	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	4.3	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	28	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.559	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Dibromomethane	7.9	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane	190	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	1.3	0.2 U	0.2 U	0.2 U	0.2 U
Hexachlorobutadiene	0.5	0.5 U	0.5 U	0.5 U	0.5 U
Iodomethane	--	1 U	1 U	1 U	1 U
Isopropylbenzene	--	0.2 U	0.2 U	0.2 U	0.2 U
m,p-Xylene	190	0.4 U	0.4 U	0.4 U	0.4 U
Methyl-t-butyl ether (MTBE)	7.5	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	12	1 U	1 U	1 U	1 U
n-Butylbenzene	780	0.2 U	0.2 U	0.2 U	0.2 U
n-Propylbenzene	530	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	190	0.2 U	0.2 U	0.2 U	0.2 U
sec-Butylbenzene	1,600	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	100	0.2 U	0.2 U	0.2 U	0.2 U
tert-Butylbenzene	510	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene (PCE)	5	0.2 U	0.2 U	0.2 U	0.2 U

Monitoring Well ID Groundwater Monitoring Event Sample Date Sample Type	Benchmark Concentraiton ¹	EMW-01 Round 1 5/8/2014 Background	MW-101 Round 1 5/8/2014 Attenuation Performance	MW-102 Round 1 5/8/2014 Attenuation Performance	MW-103 Round 1 5/8/2014 Attenuation Performance
Toluene	860	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	86	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.559	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	--	1 U	1 U	1 U	1 U
Trichloroethene	0.44	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	1,100	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	410	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Chloride	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Semi-Volatile Organic Compounds (SVOCs; µg/L)					
1,2,4-Trichlorobenzene	1	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	280	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	1	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	9.4	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1	1 U	1 U	1 U	1 U
2,2'-Oxybis(1-Chloropropane)	--	1 U	1 U	1 U	1 U
2,4,5-Trichlorophenol	890	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	3	3 U	3 U	3 U	3 U
2,4-Dichlorophenol	31.3	3 U	3 U	3 U	3 U
2,4-Dimethylphenol	209	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	20.9	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	3	3 U	3 U	3 U	3 U
2,6-Dinitrotoluene	3	3 U	3 U	3 U	3 U
2-Chloronaphthalene	550	1 U	1 U	1 U	1 U
2-Chlorophenol	52.1	1 U	1 U	1 U	1 U
2-Methylphenol	--	1 U	1 U	1 U	1 U
2-Nitroaniline	150	3 U	3 U	3 U	3 U
2-Nitrophenol	--	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	5	5 U	5 U	5 U	5 U
3-Nitroaniline	--	3 U	3 U	3 U	3 U
4,6-Dinitro-2-Methylphenol	--	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	--	1 U	1 U	1 U	1 U
4-Chloro-3-methylphenol	--	3 U	3 U	3 U	3 U
4-Chloroaniline	5	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	--	1 U	1 U	1 U	1 U
4-Methylphenol	--	2 U	2 U	2 U	2 U
4-Nitroaniline	3.3	3 U	3 U	3 U	3 U
4-Nitrophenol	10	10 U	10 U	10 U	10 U

Monitoring Well ID Groundwater Monitoring Event Sample Date Sample Type	Benchmark Concentration ¹	EMW-01 Round 1 5/8/2014 Background	MW-101 Round 1 5/8/2014 Attenuation Performance	MW-102 Round 1 5/8/2014 Attenuation Performance	MW-103 Round 1 5/8/2014 Attenuation Performance
Aniline	12	1 U	1 U	1 U	1 U
Azobenzene	1	1 U	1 U	1 U	1 U
Benzoic Acid	42,700	20 U	20 U	20 U	20 U
Benzyl Alcohol	1,500	2 U	2 U	2 U	2 U
bis(2-Chloroethoxy) Methane	46	1 U	1 U	1 U	1 U
Bis-(2-Chloroethyl) Ether	1	1 U	1 U	1 U	1 U
bis(2-Ethylhexyl)phthalate	4.8	3 U	3 U	3 U	3 U
Butylbenzylphthalate	14	1 U	1 U	1 U	1 U
Carbazole	-	1 U	1 U	1 U	1 U
Diethylphthalate	8,340	1 U	1 U	1 U	1 U
Dimethylphthalate	104,000	1 U	1 U	1 U	1 U
Di-n-Butylphthalate	1,040	1 U	1 U	1 U	1 U
Di-n-Octyl phthalate	417	1 U	1 U	1 U	1 U
Hexachlorobenzene	1	3 U	1 U	1 U	1 U
Hexachlorobutadiene	3	5 U	3 U	3 U	3 U
Hexachlorocyclopentadiene	22	2 U	5 U	5 U	5 U
Hexachloroethane	2	1 U	2 U	2 U	2 U
Isophorone	67	1 U	1 U	1 U	1 U
Nitrobenzene	1	1 U	1 U	1 U	1 U
N-Nitrosodimethylamine	3	3 U	3 U	3 U	3 U
N-Nitroso-Di-N-Propylamine	1	1 U	1 U	1 U	1 U
N-Nitrosodiphenylamine	1	1 U	1 U	1 U	1 U
Pentachlorophenol	10	10 U	10 U	10 U	10 U
Phenol	3,130	1 U	1 U	1 U	1 U
Polycyclic Aromatic Hydrocarbons (PAHs; µg/L)					
1-Methylnaphthalene	0.97	0.01 U	0.01	0.01 U	0.01 U
2-Methylnaphthalene	27	0.01 U	0.0078 J	0.01 U	0.01 U
Acenaphthene	400	0.01 U	0.058	0.01 U	0.01 U
Acenaphthylene	626	0.01 U	0.0058 J	0.01 U	0.01 U
Anthracene	1,300	0.01 U	0.016	0.01 U	0.01 U
Benzo(a)anthracene	0.029	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene	0.01	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene	0.029	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene	313	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	0.29	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	2.9	0.01 U	0.0057 J	0.01 U	0.01 U
Dibenz(a,h)anthracene	0.01	0.01 U	0.01 U	0.01 U	0.01 U

Monitoring Well ID Groundwater Monitoring Event Sample Date Sample Type	Benchmark Concentration ¹	EMW-01 Round 1 5/8/2014 Background	MW-101 Round 1 5/8/2014 Attenuation Performance	MW-102 Round 1 5/8/2014 Attenuation Performance	MW-103 Round 1 5/8/2014 Attenuation Performance
Dibenzofuran	42	0.01 U	0.018	0.01 U	0.01 U
Fluoranthene	417	0.01 U	0.023	0.01 U	0.01 U
Fluorene	220	0.01 U	0.096	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	0.029	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	0.14	0.01 U	0.011	0.01	0.011
Phenanthrene	313	0.01 U	0.057	0.01 U	0.01 U
Pyrene	87	0.01 U	0.03	0.01 U	0.035
Polychlorinated Biphenyls (PCBs; µg/L)					
Aroclor 1016	0.5	0.01 U	0.01 U	0.01 U	0.01 U
Aroclor 1221	0.1	0.01 U	0.01 U	0.01 U	0.01 U
Aroclor 1242	0.1	0.01 U	0.01 U	0.01 U	0.01 U
Aroclor 1248	0.1	0.01 U	0.01 U	0.01 U	0.01 U
Aroclor 1254	0.1	0.01 U	0.01 U	0.01 U	0.01 U
Aroclor 1260	0.1	0.01 U	0.01 U	0.01 U	0.01 U

Notes:

³ Benchmark concentration referenced from the Final Post-Removal Action Groundwater Monitoring Plan

EPA = Environmental Protection Agency

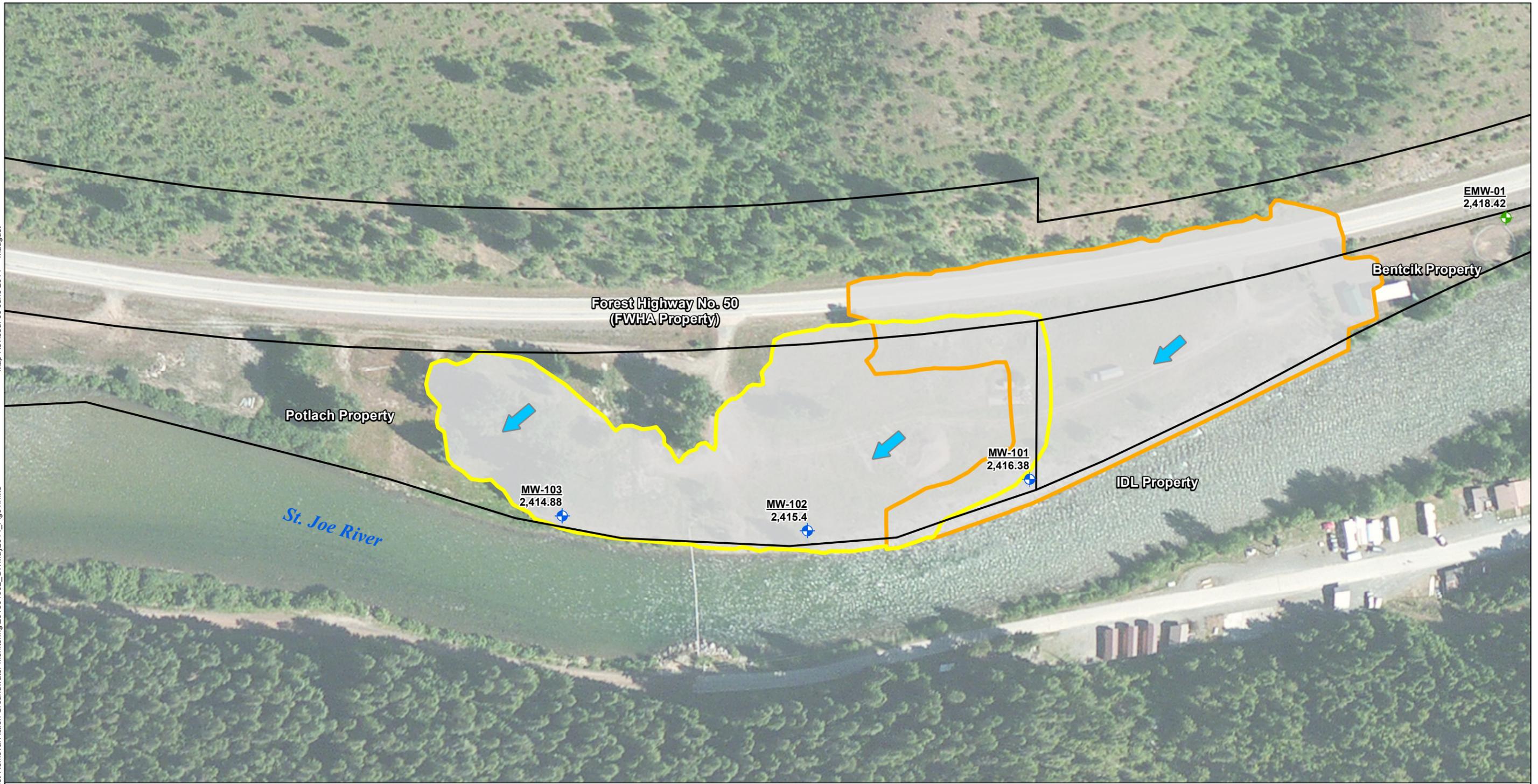
mg/L = milligrams per liter

µg/L = micrograms per liter

Bold indicates analyte was detected.

Shading indicates that target PQL is higher than the benchmark concentration.

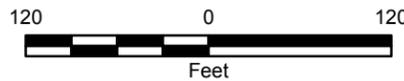
Chemical analysis was performed by Analytical Resources Inc. (ARI) of Tukwila, Washington.



Legend

- Background Groundwater Monitoring Well
- Natural Attenuation Performance Groundwater Monitoring Well
- 2013 Potlach Removal Action Excavation Limit
- 2012 EPA Removal Action Excavation Limit
- Removal Action Area
- Property Boundary

- FHWA Federal Highway Administration
- IDL Idaho Department of Land
- EPA Environmental Protection Agency
- Groundwater Flow Direction
- MW-101** Monitoring Well ID
- 2,416.38 Groundwater Elevation in feet (NAVD88)



Data Source: ESRI Maps & Data, Aerial - Microsoft, 2011
 Projection: NAD 1983 StatePlane Idaho West FIPS 1103 Feet
 Notes:
 1. The locations of all features shown are approximate.
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

May 2014 Groundwater Monitoring Event	
Avery Landing Site Avery, Idaho	
	Figure 1